2002 BDA SYMPOSIUM MINUTES

CONFERENCE PURPOSE AND SCOPE: JBDA JT&E hosted the 2nd Annual BDA Symposium on June 13 and 14, 2002, at 115 Lake View Parkway, Suffolk, VA. Topics of discussion included current issues, problems, and initiatives within the BDA community, as well as future plans and potential enhancements. JBDA also highlighted the findings and results of observation and analysis of BDA from Operation ENDURING FREEDOM (OEF). Attendees were from the Unified Commands, national agencies, a number of tactical units specializing in BDA, and from several current DOD initiatives aimed at improving BDA. (See attachment 1 for the agenda.)

BRIEFINGS: The following briefings were given on the first day of the symposium. These briefs can be viewed via the SIPRNET at http://www.jbda.jte.osd.smil.mil/symposium/briefs02/Agenda.html.

JBDA Status (JBDA) - An overview of the JBDA JT&E program, recent test activities, and future plans of interest to BDA Symposium participants.

BDA: Thoughts on the Future (CG, USA Intel Center and Ft. Huachuca) - Outline of doctrinal considerations and perspectives. Provided an overview of a generic BDA cell, OEF operations, and the global war on terrorism. Presented questions to consider during the symposium.

OEF Contingency Test (JBDA) - Presentation of JBDA data collection activities during OEF. Covered the background, data management and analysis, and potential enhancement and legacy products.

OEF Brief and Discussion (USCENTCOM) - USCENTCOM BDA supports the commander's decision-making. The brief covered Phase I, II, and III reports; how the BDA cell organized for combat; the BDA process; the OEF database; and reporting procedures.

J2T Brief (JCS, J2T) - Entitled, "Joint Staff/J2T Deputy Directorate for Targets Mission and Functions," this brief consisted of an overview of the major projects supporting BDA that J2T is leading or collaborating on. This includes BDA federation and doctrine, BDA reference handbook, JP 3-60 and JP 2-01.1, and web-based BDA training. Also covered were reporting formats, a JTT update, the JDMPI Tiger Team, and electronic CNO file folders.

Air Combat Command MEA (HQ ACC) - The OEF MEA brief provided an overview of MEA (its purpose and processes), the MEA database, and findings and current assessments.

PSAB OEF Operations (USCENTAF) - "BDA in OEF - A CFACC/CAOC/PSAB Perspective" included USCENTCOM BDA rules, bomb hit assessment and phase I BDA ("The Good, the Bad, and the Ugly"), and the way ahead.

USFK AOC Reorganization (607 AIS) - This briefing showed changes within the new 7th AF AOC structure. It also provided an operational assessment overview, ITS basics, and some of the problems associated with them.

USFK EBO Issues (USFK-J2 Targets) - Outlined C/J2 Targets Branch missions and responsibilities, including wartime functions, manpower structure, federated BDA, assessment cell, and commentary on the effects-based concept. In addition, the brief covered CFC BDA systems, products, and dissemination.

JWF Final Report (Director, JWF) - This briefing provided an overview of JT&E, the JWF background, and the test summary and findings.

WORKING GROUPS: The remainder of the symposium was spent in working groups which discussed the various topics outlined as follows. (See attachment 3 for a listing of working group members.)

1. Working Group 1 - BDA Processes

a. Mobile BDA TTP. The current state is that there is no standardized way for dealing with mobile target BDA. There is also no good way of tracking and accurately portraying to the commander the strength and combat effectiveness of mobile and maneuver forces.

(1) Issues considered during this discussion:

- Target identification and target approval for planned and immediate targets
- Collation and deconfliction of reporting
- Order of battle updating
- Combat effectiveness models
- Collection coordination issues

(2) Results: The group decided that the best way to influence the current Tiger Team working the JDMPI issue was to provide a statement of requirements and then let the Tiger Team work out the details. The following is what the group felt should be included in the string of data. This guidance will help standardization across command lines.

- Keep it short and simple
- Is it a moving or moveable target?
- Equipment code (i.e., truck, SAM, tank, etc.)
- ID for the command nominating the number

● Three-digit space, allowing up to 999 targets for each command

Commands would have flexibility in deciding when and how they would use the numbering system. They can create TTPs describing what thresholds a target must meet to be tagged.

(3) Action Items: Recommend J2T take this information and pass it to the JDMPI Tiger Team for use in developing a standardized plan.

ACTION: J2T

b. Databases and Phase I and II BDA Reports: The current state is that there are multiple databases and tracking methods for BDA. Some of these are not compatible with others or have various levels of sophistication and utility. There is currently a standard for Phase I and II reports; however, as seen during OEF, the content and utility of current reports has been challenged. Modified Phase I and II reports were met with mixed reviews.

(1) Issues considered during this discussion:

● Look at current Phase I and II reports, and compare and contrast with USCENTCOM's utilization of the reports.

● Discuss the multiple databases currently being used in the field, as well as their utility and limitations. Discuss how JTT will impact and, in the best case, prevent the use of non-standard automation answers; streamline the process.

(2) Results: After much discussion, it was decided that the Phase I, II, or III reports do not need to be changed or modified. What is needed is command flexibility in how they implement the guidance and how they use the reports. Each operation and theater will be different, and the reports, as outlined in TTPs and CONOPS, are flexible in their adaptation. What the Supported Command does need to do is ensure all Supporting Commands know how they intend to use the reports and what purpose they will serve to inform the commander. For the Phase III report, the group felt (and DIA agreed) each command could customize the report to satisfy their commander.

(3) Action Items: No further action required.

c. Immediate Target Approval Notification to BDA Cell: The current state of this issue is that while most commands do a good job in this category, there is no standardization, and most of the process is informal and personality driven. This current way of operation is not conducive to federated operations and more often than not slows down the BDA process.

(1) Issues considered during this discussion:

● Collection coordination

● Immediate re-attack recommendation process

(2) Results: The group agreed if an immediate target is attacked or re-attacked, the initiating element (i.e., the AOC) should be responsible for notifying the BDA cell and coordinating any collection required. The initiating element would then inform the BDA cell of what assets have been requested. This should be a push system to keep all informed. All command representatives felt this was being done fairly well now and should continue to operate in this manner.

(3) Action Items: No further action required.

2. Working Group 2 - BDA Processes

a. Command CONOPS: The current state is that multiple CONOPS do not always compliment other combatant commands and do not readily lend themselves to working together in a federated process.

(1) Issues considered during this discussion:

● Federated and non-federated operations and transitioning between the two

● Standardization of BDA cell organization (analysis, operations, information management, and production)

● Federated CONOPS

● Phase III format, content, and customers (especially CA/CESC/EBO) and impact on target development and TSA updating

● Personnel management and reserve augmentation

● Impact of JTT

● Local vs. national (MIDB) records

● Shared data bases and impact on federation

(2) Results:

(a) For the issue of federated and non-federated operations and transitioning between the two, and the issue of federated CONOPS:

● Group consensus was that the current federated CONOPS was necessary, useful, and appropriately vague, allowing for theater specific issues.

● Multiple CONOPS within an AOR or theater do not always compliment each other (theater, component, and supporting agencies).

● Combatant commands should ensure adherence to current CONOPS or change them to reflect current operating procedures/processes so that Supporting Commands/ organizations, both inside and outside (federated partners) the theater, can better support the war effort.

● Communications should be improved/formalized with federated partners when turning on/off or diverting from established federated process.

● Would seem worthwhile to exercise the BDA CONOPS with federated partners on a regular (recommend annual) basis.

● Vignettes could be added following each contingency to illustrate what was done as examples for future use/guidance. Suggestions as to a single responsible organization for this product included the joint staff, the respective combatant command, or JFCOM.

(b) For the issue of standardization of BDA cell organization (analysis, operations, information management and production):

● BDA cell organization should not be standardized, but left to the discretion of the parent organization.

● This organization should be reflected (and practiced) in the current BDA CONOPS.

● Models of each command's (national, theater, and component level) BDA cell to include size and scope of supported operation could be placed on a web page (DIA, J2T, JBDA, JTS, CTC, etc.) for reference. (Refer to action item 2.a.(3)(b).)

(c) For the issue of Phase III format, content, and customers (especially CA/CESC/EBO) and impact on target development and TSA updating:

● Phase III format is acceptably flexible to meet the customers' needs. Attendees realized its usefulness can vary, depending on changing command focus, priorities, and particular stage of the war effort.

● Phase III is part of a larger ongoing process; DIA's is an input to the combatant command who holds authority and responsibility for BDA.

● Format can/will change during the war operation to meet situation and requirements.

(d) For the issue of personnel management and reserve augmentation:

● Establish habitual relationships with Reserve units (e.g., EUCOM and USFK)

● Doctrine and examples from past operations exist. (Proposed vignettes might be helpful here.) This may be valuable for new federated partners (i.e., TRANSCOM and SPACECOM) to achieve a better understanding of what worked in past operations, as well as to provide a point of departure for improvements to process.

(e) For the issues of impact of JTT, local vs. national (MIDB) records, and shared databases and impact on federation:

● JTT/MIDB capabilities still have a long way to go to meet customer requirements.

● The problem is one of information management and will require CONOPS modification once JTT is fully implemented.

● Issue deferred to JTT/MIDB users group/Tiger Team for resolution.

(3) Action Items:

(a) Request J2T, DIA, and theaters provide hard/soft copy of theater and component targeting/BDA CONOPS for JBDA qualitative analysis and comparison for uncomplimentary/ complimentary qualities. Discuss/determine differences in language, content, and format. Present findings at the next symposium for working group consideration.

ACTION: J2T, DIA, Commands

(b) Request J2T, DIA, and theaters provide hard/soft copy of the targeting/BDA cell layout for the last five operations and/or major exercises participated in to include:

● Floor plan, information flow diagram

● Reporting process/structure

● Maximum thru-put (number of targets prosecuted per day)

● Number/type of reports generated

● Dissemination methods, systems used

● Database utilized

● For those supporting numerous operations and exercises, request emphasis on real-world operations.

ACTION: J2T, DIA, Commands

b. Training: The current state is that while some formal training courses exist, there is no institutionalized tracking methodology for graduates. Also have no way of tracking those lacking formal training, but a wealth of experience in real-world and exercise environments. Additionally, there is no standard on-demand training available to combatant commands for use to rapidly spin-up augmentees.

(1) Issues considered during this discussion:

- Internal organization of dedicated reserve units
- Individual - Service intelligence schools, JTS/CTC/RJITF
- Cell (e.g., Intrepid Flow, Brazen Tiger)
- Command/federated (support to major (OPLAN) exercises (e.g., UFL/IL))
- What specific training do commands want their augmentees to have in order to function as analysts?

(2) Results. For the issue of internal organization of dedicated reserve units:

- Must establish augmentee requirements at joint level. Combatant commands must review/establish requirements for skills/personnel required within targeting/BDA cell and provide to Services.
- Need a standardized way to track necessary resources, and require Service buy-in. Services must agree requirements are valid and agree to support with trained personnel.
- Need an OPR or champion to take this issue on.
- Given commands will receive untrained augmentees; recommend establishing a standard level of training (approximately 2 days) for augmentees to minimize ramp-up time.

(3) Action Items: Use JBDA and JTS (and other Service/component school/training contacts) to discuss options for accurate, accessible, and verifiable means to document all Service individuals completing BDA training. Recommend JBDA interface with combatant commands on requirements, then follow up with each Service organization responsible for filling training requirements to determine if and how (e.g., formal school or OJT) they accomplish the mission. Propose suggestions at next symposium.

ACTION: JBDA JT&E, JTS

c. MIDB Changes: Current state is that there has been much discussion on the utility and flexibility of MIDB. Most agree it is neither responsive to fluid situations, nor compatible with today's software and hardware; it is too inflexible.

(1) Issues considered during this discussion:

● Develop a needs statement for making MIDB more functional for BDA use

● JTT status, requirements, functionality, etc.

(2) Results: According to the JTT program office representative, avenues for customer-established requirements already exist. They suggested further patience to allow for the numerous software changes and Tiger Team actions to impact the current MIDB development/integration program.

(3) Action Items:

● Ensure that USFK (and all theater) POCs for MIDB and JTT are aware that money has been earmarked and already exists for on-site and system support training team visits.

● USFK (and all theaters) should ensure their specific theater requirements have been made available to the program office.

● Participate with the MIDB Tiger Team.

● Gauge amount of progress and current developments regarding MIDB development and JTT integration during the next BDA symposium.

ACTION: ALL

3. Working Group 3 - Means

a. Mobile Target Identification. The current state is no standardized way of accurately identifying and tracking mobile targets. Also, each command has its own TTP. Often, TTP changes from one contingency to another. This is not conducive to federated operations.

(1) Issues considered during this discussion:

● Examine the current methods in use by the commands, and evaluate their effectiveness and limitations.

● Discuss potential new methods and their ability to accurately track mobile targets

● Target identification and target approval for planned and immediate targets

● Collation and de-confliction of reporting

● Order of battle updating

● Combat effectiveness models

● Collection coordination issues

(2) Results. Four technical issues were identified:

(a) Conform to legacy systems (e.g., MIDB)

(b) Combat intelligence vs. combat information:

● TBMCS, etc. maintained on "static Cold War architecture"

● BENs not designed to track mobile targets

● Present information quickly rather than waiting for intelligence

(c) Track mobile targets rather than maneuver units (systems)

(d) Correlate position locations (correlate target numbers with UTM grids)

(3) Action Items: Recommend analysts work the problem using ITS and WebTask to get the information. Also, continue addressing the systemic problem by creating a new architecture that conforms to the legacy system.

ACTION: JBDA JT&E & USFK

b. Common Operating Picture (COP): The correlation capability (i.e., ASAS) and virtual collaboration capability (i.e., chat) is a proven utility for this functionality.

(1) Issues considered during this discussion:

● Many different variations

● Not all are compatible (multiple operating systems, each command has unique requirements)

(2) Results. For the maneuver force - ADOCS issues:

● Cost

● Interoperability between combatant commands

● Must move beyond ACTD

● Semi-proprietary

Key = Joint Visualization
Example: US Army Space and Missile Defense Battle Lab's AWarE System
(Restricted configuration control prevents user patches)

● Correlation capability

● Current Status: Disparate systems arguably support manual coordination in lieu of interoperable automated correlation (i.e., common database, TTP, collaboration)

● Dynamic TSA CE model

- Pull from common database → COP visualization
- Exploratory analysis (AFRL)
- Indirect effects
- System interrelationships

(3) Action Items: Evaluates a COP enhancement for the combat assessment cell.

ACTION: JBDA JT&E

c. Planned Target Approval Notification to BDA Cell. Commands accomplish planned target approval notification fairly well, but there are issues in need of review. BDA cells should be fully integrated into the process before a target is struck.

(1) Issues considered during this discussion:

- Target approval notification → BDA cell
- Target approval notification → Collections manager

(2) Results. For planned targets:

● JGAT (JPITL) → JCTB → DARS → ATO → Collection plan

● CMMA (PRISM) ↔ JTT interface should improve this gap

● Provides CM Dynamic Target List (Version 3.0)

● Collections/product tracking (flags - chat work-around, no auto-population of JTT)

● JTT target list management

(3) Action Items: There is a procedural gap. JBDA observed this during OEF and will validate it at USFK this year.

● Cost Benefit Analysis: Collections management is not only a CM responsibility. Others have to become involved.

● Ensure TST tracking through BDA

● Promote precise collection requirements ("footprint" is not all-inclusive)

● Promote Army-joint collections coordination (ATACMS via BCD and DOCC)

● ISR competition (weapon-borne sensors?)

ACTION: JBDA JT&E

d. Immediate Target Approval Notification to BDA Cell. No standardized formal process exists to facilitate an expeditious flow of information between targeting, BDA, operations, and intelligence organizations. Most commands accomplish the task using informal and personality-driven processes. This methodology is not conducive to federated operations.

(1) Issues considered during this discussion:

● Process Gap: Post-strike collections request

● Correlate requests with target nomination approval

(2) Results: A process gap exists between engagement decision and post-strike collections (IDO - TDO - DCO -----?----- BDA / ISR)

(3) Action Items: Observe and evaluate this shortfall during UFL 02.

ACTION: JBDA JT&E

Attachments:
1. Agenda
2. Attendee Contact List (not included)
3. Working Group Member Listing

Agenda

Thursday 13 June

0800-0830	Check-In	JBDA
0830-0845	Welcome/Introductions/Admin	JBDA
0845-0900	Opening Remarks	JBDA
0900-0920	JBDA Status	JBDA
0920-0950	BDA; Thoughts on the Future	CG, USAIC&FH
0950-1005	Break	
1005-1035	OEF Contingency Test	JBDA
1035-1115	OEF Brief & Discussion	USCENTCOM
1115-1200	J2T Brief	JCS, J2T
1200-1300	Working Lunch — JWF Test Report	JWF
1300-1325	Air Combat Command MEA	HQ, ACC
1325-1350	PSAB OEF Operations	USCENTAF
1350-1430	USFK AOC Reorganization & EBO Issues	USFK, J2
1430-1445	Break	
1445-1630	Working Group Discussions	Atch (3)
1630-1700	Working Group Progress Check	Atch (3)
*1830	Social (optional) at Holiday Inn	

Friday 14 June

0800-1100	Working Group Discussions	Atch (3)
1100-1130	Working Group Progress Check	Atch (3)
1130-1230	Lunch	
1230-1245	Army Birthday Recognition	
1245-1530	Working Group Discussions	Atch (3)
1530-1600	Consolidated Working Group Wrap-up	Atch (3)
1600-1615	Closing Remarks	JBDA
1615-TBD	Travel	

2002 BDA Symposium
Working Group Member Assignments

Group 1 - BDA Processes
Moderator:
JBDA
JBDA
USJFCOM/JWAC
USCENTCOM
DIA/OSJ
USJFCOM/JTS
USSTRATCOM
Permanent HQ UK
JCS/J2T
USFK - J2
USSOUTHCOM
NRO
DTRA
IDA
HQ ACC

Group 2 - BDA Processes
Moderator:
JBDA
607 AIS
JICPAC
DIA/05J-4
NORAD-USSPACECOM
USJFCOM/JTS
USCENTAF
JCS/J2T
USTRANSCOM
Permanent HQ UK
USEUCOM/JAC Molesworth
HQMC Intel Directorate
DIA
Korea
IDA
Applied Research Assoc.

Group 3 - Means
Moderator:
JBDA
JPSD - TPSO
46 OG/OGM/OL-AC
AFRL/MNAV
USCENTCOM
USJFCOM
HQ USAF/XOIRB
JCS/J2T-2
DTRA (Northrop Grumman)
Eclectic Computing Concepts
JFIC
NRO
USEUCOM/ JAC Molesworth
HQ ACC
DIA
Marine Corps Sys Com
Naval Strike & Air Warfare Cntr
AFRL/Rome Labs
AFC21SRC A-23
AFC21SRC A-23